

Financial Market Conditions, Sector Price Movements: 2002-2012



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Study Objective:

Determine if financial market conditions covary with S&P sector prices

Time Period

- 2001-2012
- 2009-2012

Model Specifications:

$$S_{it} = a - b(\text{NFCI}_t)$$

$$\text{SPY}_t = a - b(\text{NFCI}_t)$$

S_i = i th S&P sector

SPY = S&P 500 index

a = intercept

b = slope coefficient

NFCI = National Financial Conditions Index

t = time in months

Hypothesis:

There is an inverse relationship between NFCI and sector/market prices.

Regression Results:

X = NFCI: 12/31/01 - 12/31/12				
Index	Intercept	Slope	Tstat	R ²
XLP	26	0.07	0.14	0.0001
XLV	31	-4	-6	0.22
XLE	53	5	2	0.04
XLF	22	-6	-6	0.21
XLV	31	-2	-4	0.10
XLI	30	-2	-2	0.04
XLB	31	-0.11	-0.13	0.00012
XLK	21	-1	-3	0.05
XLU	31	1	1	0.01
IYZ	22	-2	-4	0.12
SPY	117	-8	-4	0.10

X = NFCI: 3/31/09-12/31/12				
Index	Intercept	Slope	Tstat	R ²
XLP	28	-7	-8	0.58
XLV	33	-13	-9	0.65
XLE	60	-17	-7	0.5
XLF	14	-3	-12	0.76
XLV	31	-7	-8	0.58
XLI	30	-10	-12	0.77
XLB	32	-8	-11	0.73
XLK	23	-7	-9	0.66
XLU	31	-5	-6	0.48
IYZ	20	-4	-9	0.64
SPY	114	-31	-11	0.73

Conclusion:

Long-term period: majority of sectors plus SPY have slope coefficients with the right sign and are statistically significant

Short-term period: all sectors plus SPY have slope coefficients with the right sign and are statistically significant. R²'s are much higher in the short-term period. XLF, XLI, XLB, and SPY have over 70% of their price movements explained by NFCI.

Regression results support the hypothesis of an inverse relationship between NFCI and sector/market prices.